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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/616,398

07/09/2003

Jens Bastue

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07/26/2006

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EXAMINER

LAUCHMAN, LAYLA G

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,398

Applicant(s)

BASTUE ET AL.

Examiner

L. G. Lauchman

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-41 and 49-52 is/are allowed.
- 6) ☐ Claim(s) 42-48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by Beattie et al (US 6,741,408).

The patent '401 teaches a method of mounting a diffraction grating to a frame, comprising:: attaching the diffraction grating to the frame while permitting independent thermal expansion and contraction of the diffraction grating and the frame under conditions of changing temperature (see col. 6 lines 19-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Beattie et al (US 6,741,408).

RE Claims 42 and 46, the patent teaches the method as applied to claim 42, however, it does not explicitly describe that the attaching the diffraction grating to the frame comprises attaching the

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diffraction grating to the frame using a portion of adhesive at a position along the grating frame. However, to do so is suggested by the patent (see col. 6, lines 3-5), It would have been obvious to one skilled in the art at the time the invention was made to use an adhesive to attach the grating to the frame in order to strengthen the contact between the elements.

RE Claim 45, the patent teaches the method as applied to claim 41, however, it does not explicitly describe attaching the diffraction grating to the frame comprises clipping the diffraction grating to the grating frame using one or more clips. However, the patent discloses using pins to connect the frame to the grating (see col. 6, lines 12-14). It would have been obvious to one skilled in the art at the time the invention was made to use clips instead of pins in order to make the structure more easily constructed.

RE Claims 43 and 44, the patent teaches the method as applied to claim 42, as applied above, with the exception of placing the portion of adhesive at one end of the grating frame. Placing an adhesive at a certain part of the grating frame is merely within the level of ordinary skill in the art and not germane to the issue of patentability of the method itself, and therefore it would be obvious to one skilled in the art at the time the invention was made to place the portion of adhesive at one end of the grating frame of the invention '408 in order to achieve desirable results.

RE Claim 47 and 48, the patent teaches the method as applied to claim 41, however, it does not explicitly describe that the diffraction grating is a transmissive diffraction grating or a reflective diffraction grating. However, the patent discloses that the grating could be of any type (see col. 3, lines 50-65). It would have been obvious to one skilled in the art at the time the invention was

made to provide transmissive diffraction grating or a reflective diffraction grating, since the type of the grating would not affect the athermal mount of the grating to the frame.

Allowable Subject Matter

Claims 1-40, 49-52 are allowed.

The following is an examiner's statement of reasons for allowance:

As to Claim 1, the prior art of record taken along or in combination, fails to disclose or render obvious the first transmissive diffraction grating being oriented so that light reflected by the first transmissive diffraction grating is reflected in a direction non-parallel to the diffraction plane, in combination with the rest of the limitations of the claim.

As to Claim 18, the prior art of record taken along or in combination, fails to disclose or render obvious the first transmissive diffraction grating is oriented so that light, reflected from the transmissive diffraction grating and reflected back through the transmissive diffraction grating, reaches a focal plane of the first focusing unit outside the active aperture, in combination with the rest of the limitations of the claim.

As to Claim 19, the prior art of record taken along or in combination, fails to disclose or render obvious orienting the first transmissive diffraction grating so that light reflected by the first transmissive diffraction grating is reflected out of the diffraction plane, in combination with the rest of the limitations of the claim.

As to Claim 24, the prior art of record taken along or in combination, fails to disclose or render obvious the first diffraction grating unit comprising a diffraction grating attached to a frame using a mounting, the mounting permitting independent thermal expansion and contraction

of the grating and the frame under conditions of changing temperature, in combination with the rest of the limitations of the claim.

As to Claim 49, the prior art of record taken along or in combination, fails to disclose or render obvious the temperature dependent wavelength shift of diffracted light at the optical detector is no more than 0.01 nm/K when the light received from the input port has a wavelength range greater than 100nm, in combination with the rest of the limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments filed 5/08/2006, with respect to the rejection of claims 1-40, 49-52 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Beattie et al (US 6,741,408).

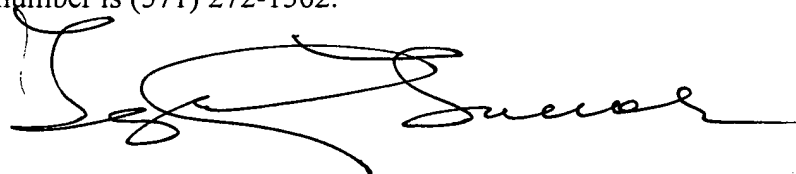
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. G. Lauchman whose telephone number is (571) 272-2418. The examiner's normal work schedule is 8:00am to 4:30pm (EST), Monday through Friday. If attempts to reach examiner by the telephone are unsuccessful, the examiner's supervisor Gregory J. Toatley, Jr. can be reached on (571) 272-2059, ext. 77.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC receptionist whose telephone number is (571) 272-1562.

A handwritten signature in black ink, appearing to read 'L. G. Lauchman', with a long horizontal flourish extending to the right.

L. G. Lauchman
Primary Examiner
Art Unit 2877

July 23, 2006